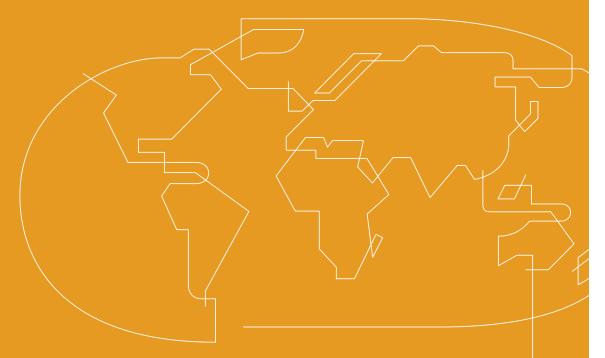
# **Official Institutions Group**

By **Elliot Hentov**, Head of Policy and Research, Official Institutions Group ssga.com/oig



# HOWDO CENTRAL BANKS INVEST?

A Glance at their Investment Tranche

STATE STREET GLOBAL ADVISORS

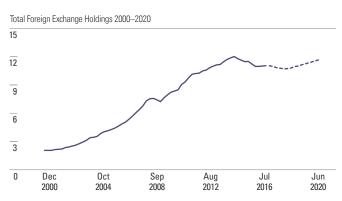
Since 2008, central bank investments are frequently viewed through the prism of their monetary policy-driven asset purchases. Quantitative easing and a plethora of other asset purchase programs have expanded the balance sheets of most developed economies' central banks. However, the increased focus on central bank actions in these domestic asset classes has distracted from secular trends taking place among central banks' foreign reserve portfolios.

This paper aims to illustrate and forecast the gradual shifts in investment strategies of reserve managers coping with the low yield environment. We identify two clear trends: 1) increased exposure to active fixed income in contrast to other parts of the investment universe turning to passive vehicles; 2) cautious embrace of equities as a new reserve asset class.

From 2003–2014, a combination of factors triggered an unprecedented growth in global foreign reserve holdings. While nominal world GDP grew an annual average of 6.2% during that period, the stock of total foreign reserves grew by 14.3% annually. The disparity is partially explained by the commodity boom, higher trend growth in emerging economies, and export led growth resulting in large current account surpluses. In particular, it is prudent to recall that many of today's large reserve holders in Asia responded to the Asian financial crisis in 1997–1998 by deliberately pursuing a policy framework that placed greater value on foreign reserve accumulation in order to create greater external buffers ahead of another crisis.

Conversely, reserve accumulation ended in 2014 and has since declined in the face of lower commodity prices, weaker economic growth in emerging markets as well as capital outflows stemming from portfolio flows or repayment of external debt. As per Figure 1, State Street Global Advisors (SSGA) believes that reserves are approaching the bottom of the recent retrenchment. In the near term, international monetary politics, US growth and corollary dollar strength could lead to reserve decumulation over the coming year as emerging markets experience capital outflows and central banks use reserves to buffer exchange rate depreciation. However, a positive cycle of reserve growth should restart in 2018, albeit at a much steadier pace of accumulation than pre-2014. According to this forecast, total foreign reserves will reclaim their 2014 high of around \$12 trillion by late 2020.

Figure 1: Total Foreign Exchange Holdings 2000-2020 (USD trillion)

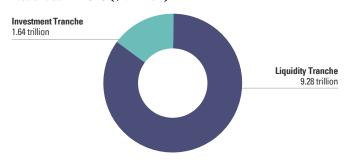


Source: IMF for data through Q3 2016 (solid blue line), SSGA Research for forecast figures (dashed red line).

This macro forecast is our starting point to assess the investment tranches of global foreign reserves. The investment tranche is the portion of the foreign reserves that is not designated for external liquidity purposes, but serves primarily national wealth management objectives. The exact cut-off point within reserves is strongly debated, but the defining feature of investment tranche is that these reserves are liberated from constraints that would apply to conventional foreign reserves. In theory, they can be invested long-term and do not have rigid liquidity requirements.

According to our proprietary research, we estimate the investment tranche constitutes roughly 15% of the total stock of reserves in 2016. This number is skewed by the relatively large size of investment tranches among the largest reserve holding central banks. Notably, the eight largest holders accounted for more than 80% of global central bank investment funds. All in all, the value of this tranche equalled \$1.64 trillion (see Figure 2) last year.

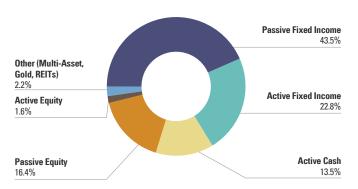
Figure 2: Global Investment Tranche Share of Total Reserves in 2016 (\$ trillion)



Source: IMF for total reserve data; SSGA Research for estimate of investment tranche share.  $^{2}$ 

Figure 3 displays our estimated breakdown of investments along major asset classes and strategies. Unsurprisingly, the overwhelming bulk of investment resides in cash and fixed income products, constituting nearly 80% of the total portfolio. Given that these funds emerge from a conventional reserve portfolio and central banks' core expertise is in managing fixed income assets, bonds and cash-like instruments should dominate. In addition, this also reflects the lower risk tolerance that central banks typically exhibit compared to a sovereign wealth fund or an endowment. As the ultimate guardian of national wealth, the reliance on fixed income is also understood as the most prudent approach to managing risk. However, at the same time, the question arises why the investment tranche (which functions as a long-term investment tool for capital gains purposes) would have such large exposure to passive fixed income as well as cash products. If the investment tranche is designed to produce extra yield vis-à-vis standard bond portfolios, such a high allocation seems ineffective. The imbalance is actually greater than seen in Figure 3 as only a small number of central banks have incorporated meaningful equity exposure into their portfolios. In other words, the average investment tranche is even more skewed toward passive fixed income.

Figure 3: Asset Allocation of Investment Tranche of Global Foreign Reserves in 2016 (%)



Source: SSGA Research.

Note: Active cash includes securities lending and passive fixed income includes basic enhanced strategies.<sup>3</sup>

In our view, the main reason for this choice of passive fixed income is institutional. The majority of the investment tranche continues to be managed in-house by reserve management departments. First, these departments have developed and honed their investment skills in fixed income strategies, particularly passive investment, so institutional expertise is inherently biased in that direction. The umbrella of passive investing includes any type of buy-and-hold approach even if it still allows for degrees of enhancement, so reserve managers are able to customise their benchmarks and build unique bond portfolios.

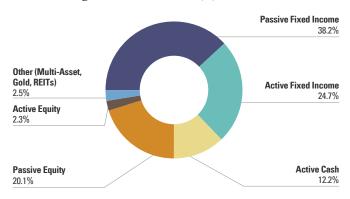
Second, there is sizable lead time for a central bank to make fundamental changes to investment guidelines. For example, the Czech National Bank publicly explained why the process took three years to make its first equity investment after it first raised the idea internally, a time frame in line with the experiences of other central banks. And third, in a world full of liquidity and distorted price signals, passive investments are the more conservative and prudential approach — which reflects the institutional DNA of the central banking community. Lastly, there may also be structural forces at play here. The presence of large foreign reserves now contends with diminishing liquidity in major debt markets, which creates massive challenges for active investing from a trading perspective.

Nonetheless, we have found evidence to believe that this is — very gradually — changing. By 2020, we expect central bank investment portfolios to have evolved slightly away from passive fixed income in favour of active fixed income and equity investment. However, it is important to note that we do not expect central banks to reduce their nominal passive fixed income positions. It will rather be that reserve portfolio growth will be channelled into other strategies.

### How Do Central Banks Invest?

As mentioned earlier in Figure 1, we forecast total reserves to grow an annualized 2.6% during 2017–2020. At the same time, we expect a slightly higher allocation to the investment portfolio during this period, particularly among the larger reserve holders. Their experience in diversifying their investment portfolio has been broadly positive while overall reserves have either grown or been stable. This would imply an annualized 4.3% growth of the global investment tranche, or equal to \$1.94 trillion in 2020. Figure 4 shows our aggregated forecast for the asset allocation of central banks' investment tranche in 2020, which at first sight does not look dramatically different from the 2016 figures.

Figure 4: Asset Allocation of Investment Tranche of Global Foreign Reserves in 2020 (%)



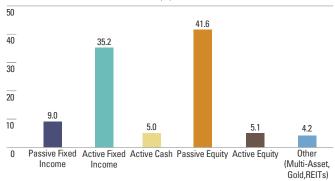
Source: SSGA Research.

Note: Active cash includes securities lending.

However, a more striking visual presentation of the change is seen in Figure 5, which illustrates that more than 75% of future asset growth (i.e. new investment assets) is expected to be deployed either in equity or active fixed income strategies. In other words, of the future forecasted \$298 billion that we expect to be added to the investment tranche, the vast majority (\$228 billion) is likely to be positioned in those two strategies.

Figure 5: Growth of Rate of Central Bank Investments by Asset Class 2016–2020





Source: SSGA Research.

Note: Active cash includes securities lending.

## Conclusion

It remains unclear whether or how substantial a reversal in the yield environment will take place over the coming four years. However, we can be certain that central banks — in their role as investors of reserve portfolios — will be investing much like other investors: riskier assets and continued search for higher yield beyond their core bond portfolios. Even if bond yields jump more than currently forecast, we still believe this structural trend will prevail. In this context, reserve managers with investment tranches are increasingly becoming convinced that equity in passive form has a core role on central bank balance sheets. The immediate effect will be central banks contributing to the overall growing flows into passive equity products. In the longer term, it speaks to the evolution of central bank reserve management. Having achieved comfort levels with new asset classes and requisite risk management, there is only one direction of travel, namely to continue to broaden the toolkit and gradually expand further.

- Source: IMF (World GDP in Current USD as nominal figure and Total Foreign Exchange Holdings in the world)
- <sup>2</sup> The estimate for the size of the investment tranche rests on combining two sub-estimates. The main component is adding the respective investment tranche share of each of the largest 20 reserve holders, based on public documentation and anecdotal evidence. The second component is to allocate an estimated residual share for the remaining central banks, based on triangulating public and private data.
- <sup>3</sup> We estimated the asset allocation by first constructing an estimated ratio of central banks executing mandates in-house for each particular asset class. This ratio derives from publicly available data, proprietary data and anecdotal evidence. All externally awarded mandates are publicly known so one can add the cumulative amount of released tenders in 2016 for each asset class and then divide that sum by the estimated ratio described above to arrive at an overall nominal figure for assets invested. We applied this methodology for each asset class and left passive fixed income (which would include traditional buy-and-hold) as the residual category.
- <sup>4</sup> Singer, Miroslav (Governor of the Czech National Bank). "How to Gain from Equities", in Global Public Investor 2015, pp.92–93.

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